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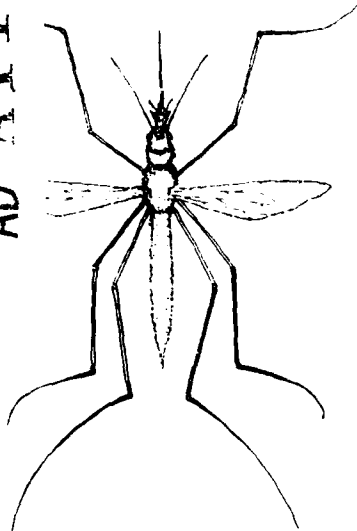
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EDITED BY

C. T. O'CONNOR and TINE SOPA



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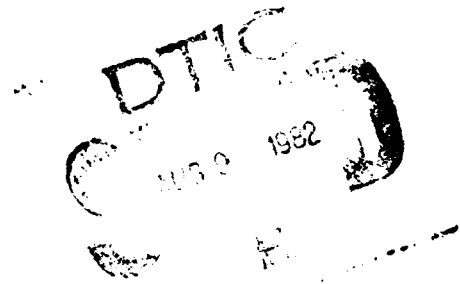
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OF INDONESIA

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World Health Organization

by

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1981



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A CHECKLIST OF THE MOSQUITOES OF INDONESIA

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Indonesia is represented by a varied mosquito fauna, embracing some 450 known species of 2960 listed worldwide in Knight and Stone (1977). This is primarily a result of the widespread distribution of the country's many islands, which range from the southeastern Oriental Region across the Wallace and Weber lines to the northwestern Australian Region. This fauna has been, both during the colonial and post-colonial periods, the subject of many investigations in the fields of taxonomy, distribution, bionomics and disease relationships. While a few earlier checklists exist, none have been prepared specifically for Indonesia which take into account the extensive studies of the last 30 years. This paper is intended to fill that gap.

The primary literature sources for these data were the Knight and Stone (1977) worldwide catalog and the supplement of Knight (1978). The arrangement of the various taxa follows their format. In those cases where the abovementioned authors have cited distributional records of a general nature, for example, "Oriental Region" or "Indonesia", and specimens were not available in local collections, more precise locations were sought from other sources, but no attempt was made to review the literature comprehensively. Several species have been listed here merely as "Indonesia" because of a lack of specific information. The other sources include: Belkin (1962), Bonne-Wepster and Swellengrebel (1953), Bram (1967), Brug and Bonne-Wepster (1947), Delfinado (1966, 1967, 1968), Harrison and Scanlon (1975), Huang (1968, 1972), Knight (1968), Lien et al. (1975, 1977), Peyton (1977), Ramalingam (1974), Reid (1968), Reinert (1970, 1973, 1975, 1976), Rozeboom and Knight (1946), Sirivanakarn (1968, 1973, 1976, 1977), Steffan (1968) and Tyson (1970 a, b).

Data are presented with regard to the distribution of the 456 listed species on the major islands and their satellites throughout Indonesia employing provincial boundaries delineated by the Indonesian government. The number of taxa in each of the 18 genera is shown in Annex 1. Distributional citations encountered in the literature are identified by the symbol "L". Additional records derived from specimens actually present in collections maintained by units in the compounds of the CDC/P3M, Jakarta are marked with the symbol "C". Literature citations questioned by the authors themselves and specimens in the CDC/P3M collections which are of uncertain identity are preceded by an interrogation mark. The taxa originally described from Indonesia, comprising 148 species, 2 subspecies and 8 varieties, and their generalized type localities are identified by the letter "T".

Indonesia shares 2 of the larger islands within its boundaries, Borneo and New Guinea with the countries of Malaysia and Papua-New

Guinea, respectively. In some cases, species reported from other areas in Indonesia are also listed in the available literature merely as "Borneo" or "New Guinea". Since these citations do not differentiate the Indonesian from the foreign portions of these islands, we have denoted such situations in the list by "L*". In other cases, species have been found on these 2 islands but not in any other part of Indonesia. A separate list (Annex 2) has been prepared of the species which have either been reported from the foreign portions of these islands or the available literature sources merely stipulate "Borneo" or "New Guinea" and the precise locations have not been ascertained. Since mosquito collecting has been relatively limited in Kalimantan (Indonesia Borneo) and Irian Jaya (Indonesian New Guinea) it would seem a distinct possibility that further work will add a sizeable proportion of these mosquitoes to the fauna of Indonesia. The abbreviations employed in the list are those proposed by Reinert (1975). Annex 3 lists the genera and subgenera in Indonesia as well as the proposed abbreviations used in Annex 2.

Although our knowledge of the distribution of anopheline mosquitoes has been greatly augmented during the course of intensive anti-malaria activities, considerably more work is needed, especially with those species groups in which the females are indistinguishable. For example, the precise ranges of barbumbrosus and vanus of the barbirostris group, separatus and hunteri of the umbrosus group, aitkenii, fragilis and bengalensis of the aitkenii group and pilinosum and insulaeflorum, also of the aitkenii group, await confirmation through the study of the immature stages.

Whether or not campestris exists in Indonesia has yet to be definitely established. Harrison and Scanlon (1975) and Reid (1968) point out that variation in adult morphology necessitates the study of the associated immature stages in order to delineate the respective ranges of this species and barbirostris. These authors feel that campestris may be limited to Thailand and Malaysia. Ramalingam (1974) observed a combination of barbirostris abdominal scaling and campestris wing scaling on the same individuals in Java, but all of the associated skins indicated that they were barbirostris. Adult specimens of this type have been collected from a number of other areas in Indonesia, however, the species determination has yet to be confirmed through the immature stages. With these reservations, campestris has been included in the list with an interrogation mark because of its importance as a vector of malaria and filariasis in Malaysia (Reid, 1968).

An. dirus, recently described in Thailand (Peyton and Harrison, 1979) from what had heretofore been called An. balabacensis, has not been created here because of the paucity of immature forms available.

Only a small proportion of the identifications of the culicine mosquitoes in the collections at the CDC/P3M, Jakarta have been confirmed by specialists. In fact, a considerable number have yet to be even provisionally identified. Four species, Ae. (Adm.) taeniorhynchoides, Cx. (Lop.) aculeatus, Ur. (Ura.) heiseri and Ur. (Ura.) pygmaea, have been provisionally identified locally, but are not indigenous to Indonesia according to the literature sources cited.

Cx. (Cux.) quinquefasciatus is the name employed here in deference to its priority under the rules of the International Code of Zoological Nomenclature (Knight and Stone, 1977 and Sirivanakarn, 1976), although fatigans is the term most commonly utilized by workers in Indonesia.

D I S T R I B U T I O N ¹

Taxonomic listing

Smt Kln Jw LSI Slw Mlk IJ Ind.

Subfamily ANOPHELINEAE Genus ANOPHELES Meigen Subgenus ANOPHELES Meigen

1. <u>aitkenii</u> James, 1903	L	L	L	L	L	?L	L
2. <u>albotaeniatus</u> (Theobald), 1903	L	L	L		LC	L	
3. <u>annandalei</u> Prashad, 1918			L				
4. <u>argyropus</u> (Swellengrebel), 1914	LCT		LC				
5. <u>baezai</u> Gater, 1933	L	L	L	L	LC		
6. <u>bancroftii</u> Giles, 1902					C	L	L
7. <u>bancroftii</u> var. <u>barbiventris</u> Brug, 1938					LT		
8. <u>barbirostris</u> Van der Wulp, 1884	LC	LC	LCT	LC	LC	L	
9. <u>barbumbrosus</u> Strickland and Chowdhury, 1927	LT	?L	LT	?L	?L	?L	
10. <u>bengalensis</u> Puri, 1930		L	L		?L		
11. <u>brevipalpis</u> Roper, 1914	L	LC					
12. <u>campestris</u> Reid, 1962							?
13. <u>crawfordi</u> Reid, 1953	LC		C		C		
14. <u>donaldi</u> Reid, 1962	?L	L*	?L				
15. <u>ejerцитoi</u> Mendoza, 1947					C		
16. <u>fragilis</u> (Theobald), 1903		L*			L		
17. <u>gigas</u> Giles, 1901					L		
18. <u>gigas</u> var. <u>sumatrana</u> Swellengrebel and Rodenwaldt, 1932	LT						
19. <u>gigas</u> var. <u>danaubento</u> Mochtar and Walandouw, 1934	LT						
20. <u>gigas</u> var. <u>oedjalikalalah</u> Nainggolan, 1939	LT						
21. <u>gigas</u> var. <u>pantjarbatu</u> Koesoemawinangoen, 1954	LT						
22. <u>hunteri</u> (Strickland), 1916	L						
23. <u>insulaeflorum</u> (Swellengrebel and Swellengrebel de Meaf), 1919	L		LT	L	L	?L	?L
24. <u>lesteri</u> ssp. <u>paraliae</u> Sandosham, 1959	C	L*C					
25. <u>letifer</u> Sandosham, 1944	LC	LC					
26. <u>montanus</u> Stanton and Hacker, 1917	LC	L					
27. <u>nigerrimus</u> Giles, 1900	LC	LC	LC		LC	L	
28. <u>nitidus</u> Harrison, Scanlon and Reid, 1973	LC	C					

¹ Smt = Sumatera
Kln = Kalimantan
Jw = Java
LSI = Lesser Sunda Islands

Slw = Sulawesi
Mlk = Maluku
IJ = Irian Jaya
Ind = Indonesia

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
29. <u>palmaris</u> (Rodenwaldt), 1926	L	L	LT			L	L	
30. <u>peditaeniatus</u> (Leicester), 1908	LC	LC	LC	C	LC			
31. <u>pillinotum</u> Harrison and Scanlon, 1974						L	?L	
32. <u>pseudobarbistrois</u> Ludlow, 1902					L	L	L	
33. <u>roperi</u> Reid, 1950	L	L*						
34. <u>separatus</u> (Leicester), 1908	LC	L				L		
35. <u>similissimus</u> Strickland and Chowdhury, 1927	?L							
36. <u>sinensis</u> Wiedemann, 1828	LC	C						
37. <u>stigmaticus</u> Skuse, 1889							L	
38. <u>umbrosus</u> (Theobald), 1903	LC	LC	L		L	L		
39. <u>vanus</u> Walker, 1859		L*			LT	L	L	
40. <u>whartoni</u> Reid, 1963		C						
Subgenus: <u>CELLIA</u> Theobald								
41. <u>aconitus</u> Doenitz, 1902	LCT	LC	LCT	LC	LC			
42. <u>annularis</u> Van der Wulp, 1884	LC	LC	LCT	LC				
43. <u>annulatus</u> De Rook, 1929							LT	
44. <u>annulipes</u> Walker, 1856							L	
45. <u>balabacensis</u> Baisas, 1936	C	LC	LC					
46. <u>clowi</u> Rozeboom and Knight, 1946							LT	
47. <u>cristatus</u> King and Baisas, 1936							?L	
48. <u>farauti</u> Laveran, 1902						L	LC	
49. <u>flavirostris</u> (Ludlow), 1914	LC	LC	L	LC	L			
50. <u>hackeri</u> Edwards, 1921	LC	L			L			
51. <u>hilli</u> Woodhill and Lee, 1944							L	
52. <u>incognitus</u> Brug, 1931							LT	
53. <u>indefinitus</u> (Ludlow), 1904	L	C	LC	C	C			
54. <u>karwari</u> (James), 1902	LC	L	LC		L		L	
55. <u>kochi</u> Doenitz, 1901	LCT	LC	LC	LC	L	L		
56. <u>koliensis</u> Owen, 1945							LC	
57. <u>leucosphyrus</u> Doenitz, 1901	LT	L	L		L			
58. <u>longirostris</u> Brug, 1928						LC	LCT	
59. <u>ludlowae</u> (Theobald), 1903		L*			L	L		
60. <u>ludlowae</u> var. <u>torakala</u> Stoker and Koesoemawinangoen, 1949					LT			
61. <u>lungae</u> Belkin and Schlosser, 1944							L	
62. <u>maculatus</u> Theobald, 1901	LC	LC	LC	LC	L			
63. <u>meraukensis</u> Venhuis, 1932							LT	
64. <u>minimus</u> Theobald, 1901	LC	LC	L	LC	LC			
65. <u>nivipes</u> (Theobald), 1903	LC							
66. <u>novaguinensis</u> Venhuis, 1933							LT	
67. <u>pallidus</u> Theobald, 1901	L							
68. <u>parangensis</u> (Ludlow), 1914	C	L*			LC	?L		
69. <u>philippinensis</u> Ludlow, 1902	LC	LC	LC					

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
70. <u>pujutensis</u> Colless, 1948	L	LC						
71. <u>punctulatus</u> Doenitz, 1901						L	LC	
72. <u>ramsayi</u> Covell, 1927	L		L					
73. <u>schueffneri</u> Stanton, 1915	LT		LC					
74. <u>subpictus</u> Grassi, 1899	LC	LC	LC	LC	LC	L	L	
75. <u>sulawesi</u> Koesoemawinangoen, 1954					LCT			
76. <u>sundaicus</u> (Rodenwaldt), 1925	LC	LC	LC	LC	LC	LC		T
77. <u>tessellatus</u> Theobald, 1901	LC	LC	LC	LC	LC	L	LC	
78. <u>tessellatus</u> var. <u>orientalis</u> (Swellengrebel and Swellengrebel de Graaf), 1919					LT	L		
79. <u>tessellatus</u> var. <u>kalawara</u> Stoker and Koesoemawinangoen, 1949					LT			
80. <u>vagus</u> Doenitz, 1902	LCT	LC	LCT	LC	LC	L		
Genus <u>BIRONELLA</u> Theobald								
Subgenus <u>BIRONELLA</u> Theobald								
1. <u>gracilis</u> Theobald, 1905						L	L	
Subgenus <u>BRUGELLA</u> Edwards								
2. <u>hollandi</u> Taylor, 1934							L	
3. <u>travestita</u> (Brug), 1928							LT	
Subgenus <u>NEOBIRONELLA</u> Tenorio								
4. <u>confusa</u> Bonne-Wepster, 1951							LT	
5. <u>papuae</u> (Swellengrebel and Swellengrebel de Graaf), 1919							LT	
6. <u>soesiloi</u> (Strickland and Chowdhury), 1931							LT	
Subfamily CULICINAE								
Tribe AEDEOMYIINI								
Genus <u>AEDEOMYIA</u> Theobald								
Subgenus <u>AEDEOMYIA</u> Theobald								
1. <u>catasticta</u> Knab, 1909,	L	L	L	L	L	L	L	
Tribe AEDINI								
Genus <u>AEDES</u> Meigen								
Subgenus <u>AEDIMORPHUS</u> Theobald								
1. <u>alboscuteclatus</u> (Theobald), 1905	L	L*	L		L	L	LC	
2. <u>caecus</u> (Theobald), 1901	L		L			L	LC	
3. <u>lowisii</u> (Theobald), 1910	L	L*			L	L		
4. <u>mediolineatus</u> (Theobald), 1901	L		L					
5. <u>pampangensis</u> (Ludlow), 1905	L	C	L					
6. <u>taeniorhynchoides</u> (Christophers), 1911	?C							

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
7. <u>vexans</u> (Meigen), 1830	LC	LC	L	L	LC	L	LC	
Subgenus <u>ALANSTONEA</u> Mattingly								
8. <u>brevitibia</u> (Edwards), 1914		L						
9. <u>treubi</u> (De Meijere), 1910			LT					
Subgenus <u>CANCRAEDES</u> Edwards								
10. <u>indonesiae</u> Mattingly, 1958	L		LT					
11. <u>mamoedjoensis</u> Mattingly, 1958					LT			
12. <u>simplex</u> (Theobald), 1903	?L		?L					
13. <u>thurmanae</u> Mattingly, 1958					LT			
Subgenus <u>DICEROMYIA</u> Theobald								
14. <u>iyengari</u> Edwards, 1923			L	L				
Subgenus <u>EDWARDSAEDES</u> Belkin								
15. <u>imprimens</u> (Walker), 1860	L	LC	L			LT	L	
Subgenus <u>FINLAYA</u> Theobald								
16. <u>albolateralis</u> (Theobald), 1908	L							
17. <u>alboniveus</u> Barraud, 1934			L					
18. <u>albotaeniatus</u> (Leicester), 1904	L							
19. <u>alticola</u> Bonne-Wepster, 1948							LT	
20. <u>anggiensis</u> Bonne-Wepster, 1937							LT	
21. <u>argenteitarsis</u> Brug, 1932							LT	
22. <u>assamensis</u> (Theobald), 1908			LC					
23. <u>aureostriatus</u> (Doleschall), 1857	L		L	L	L	LT	L*	
24. <u>aureostriatus</u> var. <u>greenii</u> (Theobald), 1903	L		L					
25. <u>avistylus</u> Brug, 1939					LT	L		
26. <u>chrysolineatus</u> (Theobald), 1907	L		L					
27. <u>derooki</u> Brug, 1932						LT		
28. <u>flavipennis</u> (Giles), 1904			L					
29. <u>formosensis</u> Yamada, 1921	L		LC	L				
30. <u>gani</u> Bonne-Wepster, 1940							LT	
31. <u>gracilelineatus</u> Bonne-Wepster, 1937							LT	
32. <u>harveyi</u> (Barraud), 1923	L		?L	?L				
33. <u>hollandius</u> King and Hoogstraal, 1946							LT	
34. <u>idjenensis</u> Brug, 1934			LT					
35. <u>jugraensis</u> (Leicester), 1908			L					
36. <u>kochi</u> (Doenitz), 1901						L	L*	
37. <u>macdougalli</u> Edwards, 1922	L		L					
38. <u>macfarlanei</u> (Edwards), 1914	L							
39. <u>nigrorhynchus</u> Brug, 1931			LT					

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
40. <u>niveoides</u> Barraud, 1934	L		L					
41. <u>niveus</u> (Ludlow), 1903	L		?LC		?L			
42. <u>notoscriptus</u> (Skuse), 1889						L	L	
43. <u>notoscriptus</u> ssp. <u>montanus</u> Brug, 1939	LT							
44. <u>novalbitarsis</u> King and Hoogstraal, 1946							L	
45. <u>novoniveus</u> Barraud, 1934	L		L	C				
46. <u>papuensis</u> (Taylor), 1914							L	
47. <u>plumiferus</u> King and Hoogstraal, 1946							LT	
48. <u>poicilius</u> (Theobald), 1903	L	L	LC	L	L		LC	
49. <u>prominens</u> (Barraud), 1923					L			
50. <u>pseudoniveus</u> (Theobald), 1905	L	L						
51. <u>quasirubithorax</u> (Theobald), 1910							L	
52. <u>saxicola</u> Edwards, 1922	L	L*	L					
53. <u>shortti</u> (Barraud), 1923	L							
54. <u>stevensoni</u> (Barraud), 1923					?L			
55. <u>subalbitarsis</u> King and Hoogstraal, 1946							LT	
56. <u>toxopeusi</u> Bonne-Wepster, 1948							LT	
57. <u>wallacei</u> Edwards, 1926							L	
Subgenus <u>GEOSKUSEA</u> Edwards								
58. <u>kabaenensis</u> Brug, 1939					LT			
59. <u>tonsus</u> Edwards, 1924						LT		
Subgenus <u>HUAEDES</u> Huang								
60. <u>medialis</u> Brug, 1932							LT	
61. <u>variepictus</u> King and Hoogstraal, 1946							LT	
Subgenus <u>LORRAINEA</u> Belkin								
62. <u>amesii</u> (Ludlow), 1903	L			C	LC			
63. <u>celebicus</u> Mattingly, 1959					LT			
64. <u>dasyorrhus</u> King and Hoogstraal, 1946							LT	
65. <u>fumidus</u> Edwards, 1928	L	?C			L			
Subgenus <u>MACLEAYA</u> Theobald								
66. <u>tremulus</u> (Theobald), 1903							L	
Subgenus <u>MUCIDUS</u> Theobald								
67. <u>alternans</u> (Westwood), 1835				L			L	
68. <u>aurantius</u> (Theobald), 1907	L	L*			L		L	
69. <u>laniger</u> (Wiedemann), 1820	L	C	LT		L			

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
70. <u>painei</u> Knight, 1948							?L*C	
71. <u>quasiferinus</u> Mattingly, 1961	L							
Subgenus <u>NEOMELANICONION</u> Newstead								
72. <u>lineatopennis</u> (Ludlow), 1905	LC	LC	LC	L	LC	L		
Subgenus <u>OCHLEROTATUS</u> Lynch Arribalzaga								
73. <u>inexpectatus</u> Bonne-Wepster, 1948							LT	
74. <u>purpuraceus</u> Brug, 1932							LT	
75. <u>vigilax</u> (Skuse), 1889				C				L
Subgenus <u>PARAEDES</u> Edwards								
76. <u>ostentatio</u> (Leicester), 1908	L?C	L*	L		C	L		
Subgenus <u>PSEUDOSKUSEA</u> Theobald								
77. <u>culiciformis</u> (Theobald), 1905							L	
78. <u>lunulatus</u> King and Hoogstraal, 1946								
Subgenus <u>RHINOSKUSEA</u> Edwards								
79. <u>longirostris</u> (Leicester), 1908	L		L		L			
80. <u>wardi</u> Reinert, 1976		L			L			
Subgenus <u>STEGOMYIA</u> Theobald								
81. <u>aegypti</u> (Linnaeus), 1762	LC	LC	LC	LC	LC	L	L	
82. <u>albolineatus</u> (Theobald), 1904	L	L	L	L	L	L	C	
83. <u>albopictus</u> (Skuse), 1894	L	LC	LC	LC	L	L	LC	
84. <u>alorensis</u> Bonne-Wepster and Brug, 1932					LT			
85. <u>annandalei</u> (Theobald), 1910	L		LC	L	L	L	L	
86. <u>desmotes</u> (Giles), 1904		LC	L	L	L			
87. <u>gardneri</u> (Ludlow), 1905		L*		L	L			
88. <u>hebrideus</u> Edwards, 1926						L	L	
89. <u>impatibilis</u> (Walker), 1859					LT			
90. <u>paullusi</u> Stone and Farner, 1945	L				LC	L		
91. <u>pseudalbolineatus</u> Brug, 1939					LT			
92. <u>pseudalbopictus</u> (Borel), 1928	L		L					
93. <u>scutellaris</u> (Walker), 1858	L		L	LC	L	L	LCT	
94. <u>w-albus</u> (Theobald), 1905	L							
Subgenus <u>VERRALLINA</u> Theobald								
95. <u>andamanensis</u> Edwards, 1922	L	L*	L					
96. <u>azureosquamatus</u> Bonne-Wepster, 1948							LT	

DISTRIBUTION 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
97. <u>bifolius</u> King and Hoogstraal, 1947							LT	
98. <u>butleri</u> Theobald, 1901	L	L?C	L		L	L		
99. <u>campylostylus</u> Laffoon, 1946							L	
100. <u>carmentis</u> Edwards, 1924						L	L	
101. <u>dux</u> Dyar and Shannon, 1925			L		L			
102. <u>foliformis</u> King and Hoogstraal, 1947							L	
103. <u>funereus</u> (Theobald), 1903						L	L	
104. <u>gibbosus</u> Delfinado, 1967			L					
105. <u>harrisonicus</u> Reinert, 1974			L					
106. <u>incertus</u> Edwards, 1922	L		L				L*	
107. <u>johorensis</u> Reinert, 1974	L							
108. <u>leilae</u> King and Hoogstraal, 1947							LT	
109. <u>lineatus</u> (Taylor), 1914				L		L	L	
110. <u>multifolium</u> King and Hoogstraal, 1947							LT	
111. <u>neomacrodisca</u> King and Hoogstraal, 1947					L	L	LT	
112. <u>panayensis</u> Ludlow, 1914		L*		L	L	L	L	
113. <u>parasimilis</u> King and Hoogstraal, 1947	C					LC	LT	
114. <u>prioekanensis</u> Brug, 1931	LT							
115. <u>quadrifolium</u> Brug, 1934							LT	
116. <u>quadrispinatus</u> King and Hoogstraal, 1947							LT	
117. <u>rarus</u> Delfinado, 1968	L							
118. <u>reesi</u> King and Hoogstraal, 1947							L	
119. <u>sentanius</u> King and Hoogstraal, 1947							L	
120. <u>similis</u> (Theobald), 1910						L	L	
121. <u>simplus</u> King and Hoogstraal, 1947							LT	
122. <u>trispinatus</u> King and Hoogstraal, 1947							L	
123. <u>uncus</u> (Theobald), 1901	L	L*	L					
124. <u>varietas</u> (Leicester), 1908	L	C						
125. <u>virilis</u> (Leicester), 1908	L	L*						

Genus ARMIGERES Theobald Subgenus ARMIGERES Theobald

1. <u>breinli</u> (Taylor), 1914							L	
2. <u>candelabrifer</u> Brug, 1939					LT			
3. <u>confusus</u> Edwards, 1915	L	L			?C			
4. <u>denbesteni</u> Brug, 1925			C			LCT	L	

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
5. <u>durhami</u> Edwards, 1917	L		LC	?L				
6. <u>foliatus</u> Brug, 1931	LT		L					
7. <u>jugraensis</u> (Leicester), 1908	L	L	L					
8. <u>kuchingensis</u> Edwards, 1915		L*	LC					
9. <u>kuchingensis</u> var. <u>javanensis</u> Brug, 1939			LT					
10. <u>lacuum</u> Edwards, 1922								L
11. <u>malayi</u> (Theobald), 1901	L	LC	LC	LC	L	L		L
12. <u>maximus</u> Edwards, 1922	L		L					
13. <u>milnensis</u> Lee, 1944								LC
14. <u>moultoni</u> Edwards, 1914	L	LC	LC	C	L			C
15. <u>papuensis</u> Peters, 1963								L
16. <u>subalbatus</u> (Coquillett), 1889	L	L	LC	L	L	L		L
Subgenus <u>LEICESTERIA</u> Theobald								
17. <u>annulipalpis</u> (Theobald), 1910	L	C	L	L	L	L		
18. <u>annulitarsis</u> (Leicester), 1908	L		L					
19. <u>balteatus</u> Macdonald, 1960	L	L*						
20. <u>digitatus</u> (Edwards), 1914	L		L					
21. <u>dolichocephalus</u> (Leicester), 1908	LC		L					
22. <u>flavus</u> (Leicester), 1908	L	L*	LC					
23. <u>longipalpis</u> (Leicester), 1904	L	L*			L			
24. <u>magnus</u> (Theobald), 1908	L	L*	L					
25. <u>omissus</u> (Edwards), 1914			L					
26. <u>pectinatus</u> (Edwards), 1914		L*	L					
Genus <u>HEIZMANNIA</u> Ludlow								
Subgenus <u>HEIZMANNIA</u> Ludlow								
1. <u>aurea</u> Brug, 1932							LT	
2. <u>communis</u> (Leicester), 1908	L							
3. <u>indica</u> (Theobald), 1905								?C
4. <u>scintillans</u> Ludlow, 1905	L	L*						
Subgenus <u>MATTINGLYIA</u> Lien								
5. <u>achaetae</u> (Leicester), 1908					L			
Tribe <u>CULICINI</u>								
Genus <u>CULEX</u> Linnaeus								
Subgenus <u>ACALLEOMYIA</u> Leicester								
1. <u>obscurus</u> (Leicester), 1908			L					
Subgenus <u>ACALLYNTRUM</u> Stone and Penn								
2. <u>bicki</u> Stone and Penn, 1947								LT
3. <u>binigrolineatus</u> Knight and Rozeboom, 1945								LT
4. <u>pallidiceps</u> (Theobald), 1905								L

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mik	IJ	Ind.
Subgenus <u>CULEX</u> Linnaeus								
5. <u>alienus</u> Colless, 1957				L				
6. <u>alis</u> Theobald, 1903				L*				
7. <u>annulirostris</u> Skuse, 1889				L	L	L	L	
8. <u>bihamatus</u> Edwards, 1926				LT				
9. <u>bitaeniorhynchus</u> Giles, 1901	LC	LC	LC	L	L	L	LC	
10. <u>dfengensis</u> Brug, 1931			LT					
11. <u>fuscocephala</u> Theobald, 1907	LC	LC	LC	LC	L			
12. <u>gelidus</u> Theobald, 1901	LC	LC	LC	LC	L	L	L	
13. <u>incognitus</u> Baisas, 1938					L	L		
14. <u>infula</u> Theobald, 1901	L	L	L					
15. <u>mimeticus</u> Noe, 1899								L
16. <u>mimulus</u> Edwards, 1915	L	LC	L		L		L	
17. <u>miraculosus</u> Bonne-Wepster, 1937							LT	
18. <u>perplexus</u> Leicester, 1908		L						
19. <u>pseudovishnui</u> Colless, 1957	LC	LC	LC	C	LC	L	L	
20. <u>quinquefasciatus</u> Say, 1823	LC	LC	LC	LC	LC	L	LC	
21. <u>sinensis</u> Theobald, 1903	LC	LC	LC	L	L	L		
22. <u>sitiens</u> Wiedemann, 1828	T	C		C			C	L
23. <u>solitarius</u> Bonne-Wepster, 1938							LT	
24. <u>squamosus</u> (Taylor), 1914						L	L	
25. <u>starckae</u> Stone and Knight, 1958				L				
26. <u>tritaeniorhynchus</u> Giles, 1901	LC	LC	LC	LC	LC	L		
27. <u>vishnui</u> Theobald, 1901	LC	LC	LC	LC	LC	L	L	
28. <u>whitei</u> Barraud, 1923	L			L		L		
29. <u>whitmorei</u> (Giles), 1904	LC	C	LC	C	LC		L	
Subgenus <u>CULICIOMYIA</u> Theobald								
30. <u>bahri</u> (Edwards), 1914				?L				
31. <u>ceramensis</u> Sirivanakarn and Kurihara, 1973						LT		
32. <u>fragilis</u> Ludlow, 1903	L	LC	L		L		L*	
33. <u>fuscicinctus</u> King and Hoogstraal, 1946							LT	
34. <u>javanensis</u> Bonne-Wepster, 1934		L	LT					
35. <u>nailoni</u> King and Hoogstraal, 1946							LT	
36. <u>nigropunctatus</u> Edwards, 1926	L	L	L		L		C	
37. <u>pallidothorax</u> Theobald, 1905	L	L	L	L		L	L	
38. <u>papuensis</u> (Taylor), 1914							L	
39. <u>pullus</u> Theobald, 1905				L		L	L	
40. <u>spathifurca</u> (Edwards), 1915	L	L	LC	L	L	L	L*	
41. <u>tricuspis</u> Edwards, 1930				LT				
Subgenus <u>EUMELANOMYIA</u> Theobald								
42. <u>brevipalpis</u> (Giles), 1902	L	L	LC		L	L	L*	
43. <u>cataractarum</u> Edwards, 1923							L	

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
44. <u>foliatus</u> Brug, 1932		L*	LT	LC				
45. <u>malayi</u> (Leicester), 1908	L	LC	L	L	L	L	L	
46. <u>tenuipalpis</u> Barraud, 1924			?L					
Subgenus <u>LOPHOCERAOMYIA</u> Theobald								
47. <u>aculeatus</u> Colless, 1965		L*?C						
48. <u>alorensis</u> Sirivanakarn, 1977				LT				
49. <u>bandoengensis</u> Brug, 1939			LT			L		
50. <u>bengalensis</u> Barraud, 1934		L						
51. <u>buxtoni</u> Edwards, 1926						L		
52. <u>cinctellus</u> Edwards, 1922	LC	L*C	L					
53. <u>cubitatus</u> Colless, 1965						L	L*	
54. <u>curtipalpis</u> (Edwards), 1914	L	L						
55. <u>digoeiensis</u> Brug, 1932							LT	
56. <u>fraudatrix</u> (Theobald), 1905	L	L	L			L	L	
57. <u>hewitti</u> (Edwards), 1914	L	L*						
58. <u>inculus</u> Colless, 1965	L							
59. <u>infantulus</u> Edwards, 1922	C		L					
60. <u>jenseni</u> (De Meijere), 1910	L	L*	LT					
61. <u>kuhnsi</u> King and Hoogstraal, 1955		L*				L	LT	
62. <u>leei</u> King and Hoogstraal, 1955							LT	
63. <u>macdonaldi</u> Colless, 1965	L	L*						
64. <u>mammilifer</u> (Leicester), 1908	L	L*	L					
65. <u>marksae</u> King and Hoogstraal, 1955							LT	
66. <u>minor</u> (Leicester), 1908		L	L				L	
67. <u>navalis</u> Edwards, 1926		L						
68. <u>ornatus</u> (Theobald), 1905							L	
69. <u>peytoni</u> Bram and Rattanarithikul, 1967	L		L					
70. <u>quadripalpis</u> (Edwards), 1914		L*			L			
71. <u>reidi</u> Colless, 1965	L	L*						
72. <u>rubithoracis</u> (Leicester), 1908	L	LC	L		C			
73. <u>shanahani</u> Sirivanakarn, 1968							L	
74. <u>solomonis</u> Edwards, 1929						L	L	
75. <u>sumatranus</u> Brug, 1931.	LT							
76. <u>traubi</u> Colless, 1965	L	L*						
77. <u>variatus</u> (Leicester), 1908	L	L*	L					
78. <u>whartoni</u> Colless, 1965	L	L*						
Subgenus <u>LUTZIA</u> Theobald								
79. <u>fuscus</u> Wiedemann, 1820	L	LC	LC	L	L			
80. <u>halifaxii</u> Theobald, 1903	L	L	LC		L	L	LC	
Subgenus <u>NEOCULEX</u> Dyar								
81. <u>crassistylus</u> Brug, 1934							LT	
82. <u>pedicellus</u> King and Hoogstraal, 1947							LT	

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
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Tribe FICALBIINI

Genus FICALBIA Theobald

- | | | | | | | | | |
|-----------------------------------|--|---|----|--|---|--|----|--|
| 1. <u>ludlowae</u> Brunetti, 1920 | | | ?L | | | | | |
| 2. <u>minima</u> (Theobald), 1901 | | L | L | | L | | L* | |

Genus MIMOMYIA Theobald

Subgenus ETORLEPTIOMYIA Theobald

- | | | | | | | | | |
|-------------------------------------|---|----|---|--|--|--|----|--|
| 1. <u>elegans</u> (Taylor), 1914 | | | L | | | | L* | |
| 2. <u>luzonensis</u> (Ludlow), 1905 | L | L* | L | | | | | |

Subgenus INGRAMIA Edwards

- | | | | | | | | | |
|-----------------------------------|--|----|---|--|--|--|--|--|
| 3. <u>fusca</u> (Leicester), 1908 | | L* | L | | | | | |
|-----------------------------------|--|----|---|--|--|--|--|--|

Subgenus MIMOMYIA Theobald

- | | | | | | | | | |
|--|---|----|---|--|---|--|----|---|
| 4. <u>chamberlaini</u> Ludlow, 1904 | L | | L | | L | | | |
| 5. <u>chamberlaini</u> issp. <u>metallica</u>
(Leicester), 1908 | L | | L | | | | L* | |
| 6. <u>flavens</u> (King and Hoogstraal),
1946 | | | | | | | LT | |
| 7. <u>hybrida</u> (Leicester), 1908 | L | L* | L | | L | | L | L |
| 8. <u>modesta</u> (King and Hoogstraal),
1946 | | | | | | | LT | |

Tribe HODGESIINI

Genus HODGESIA Theobald

- | | | | | | | | | |
|--|---|---|--|--|---|---|----|--|
| 1. <u>malayi</u> Leicester, 1908 | L | | | | | L | | |
| 2. <u>quasisanguinae</u> Leicester, 1908 | | C | | | L | L | L | |
| 3. <u>spoliata</u> Edwards, 1923 | | | | | L | L | L* | |

Tribe MANSONIINI

Genus COQUILLETIDIA Dyar

Subgenus COQUILLETIDIA Dyar

- | | | | | | | | | |
|---|-----|----|---|--|---|---|----|---|
| 1. <u>aureosquammata</u> (Ludlow), 1909 | L | C | L | | | | | |
| 2. <u>crassipes</u> (Van der Wulp), 1881 | LCT | LC | L | | L | L | LC | |
| 3. <u>giblini</u> (Taylor), 1914 | L | L* | | | | L | L | |
| 4. <u>hodgkini</u> (Wharton), 1962 | | C | C | | | | | |
| 5. <u>memorans</u> (Bonne-Wepster), 1930 | | | | | L | | LT | |
| 6. <u>nigrochracea</u> (Bonne-Wepster),
1930 | LT | | | | | | LT | |
| 7. <u>nigrosignata</u> (Edwards), 1917 | LC | C | | | | | | L |
| 8. <u>ochracea</u> (Theobald), 1903 | LC | LC | L | | | | L | |

Genus MANSONIA Blanchard

Subgenus MANSONIODES Blanchard

- | | | | | | | | | |
|---------------------------------------|----|----|----|--|---|--|---|--|
| 1. <u>annulata</u> Leicester, 1908 | L | LC | | | L | | | |
| 2. <u>annulifera</u> (Theobald), 1901 | LC | LC | LC | | L | | L | |

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
3. <u>bonneae</u> Edwards, 1930	L	L*C						
4. <u>bonnewepsterae</u> Van den Assem, 1958							LT	
5. <u>dives</u> (Schiner), 1868	LC	LC	L		LC	L	LC	
6. <u>indiana</u> Edwards, 1930	LC	LC	LT		L		L*	
7. <u>papuensis</u> (Taylor), 1914						L	LC	
8. <u>uniformis</u> (Theobald), 1901	LC	LC	LC		L	L	L	
Tribe ORTHOPODOMYIINI								
Genus ORTHOPODOMYIA Theobald								
1. <u>andamanensis</u> Barraud, 1934			L		L	L		
2. <u>anopheloides</u> (Giles), 1903	L	L	L					
3. <u>papuensis</u> Zavortink, 1968							L*	L
Tribe SABETHINI								
Genus MALAYA Leicester								
1. <u>genurostris</u> Leicester, 1908	L		LC	C	L			
2. <u>jacobsoni</u> (Edwards), 1930	LT							
3. <u>splendens</u> (De Meijere), 1909		L*	LT					
Genus TOPOMYIA Leicester								
Subgenus SUAYMYIA Thurman								
1. <u>argenteoventralis</u> Leicester, 1908	L	L						
2. <u>auriceps</u> Brug, 1939					LT			
Subgenus TOPOMYIA Leicester								
3. <u>argyropalpia</u> Leicester, 1908			L					
4. <u>dubitans</u> Leicester, 1908		7L*			L			
5. <u>gracilis</u> Leicester, 1908	L		LC	L				
6. <u>nigra</u> Leicester, 1908			L	L				
7. <u>pilosa</u> Brug, 1931	LT							
8. <u>rubithoracis</u> Leicester, 1908	L							
9. <u>spathulirostris</u> Edwards, 1923			L					
10. <u>tipuliformis</u> Leicester, 1908	L		L					
Genus TRIPTEROIDES Giles								
Subgenus RACHIONOTOMYIA Theobald								
1. <u>altivallis</u> Ronne-Wepster, 1948							LT	
2. <u>aranoides</u> (Theobald), 1901	L	L	LC	L				
3. <u>argenteiventris</u> (Theobald), 1905							L	
4. <u>discoelensis</u> Brug, 1934							LT	
5. <u>microlepis</u> (Edwards), 1927							LT	
6. <u>obscurus</u> Brug, 1934							LT	
7. <u>punctolateralis</u> (Theobald), 1903				L			L*	

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
3. <u>bonneae</u> Edwards, 1930	L	L*C						
4. <u>bonnewepsterae</u> Van den Assem, 1958							LT	
5. <u>dives</u> (Schiner), 1868	LC	LC	L		LC	L	LC	
6. <u>indiana</u> Edwards, 1930	LC	LC	LT		L		L*	
7. <u>papuensis</u> (Taylor), 1914						L	LC	
8. <u>uniformis</u> (Theobald), 1901	LC	LC	LC		L	L	L	
Tribe ORTHOPODOMYIINI								
Genus <u>ORTHOPODOMYIA</u> Theobald								
1. <u>andamanensis</u> Barraud, 1934			L		L	L		
2. <u>anopheloides</u> (Giles), 1903	L	L	L					
3. <u>papuensis</u> Zavortink, 1968							L*	L
Tribe SABETHINI								
Genus <u>MALAYA</u> Leicester								
1. <u>genurostris</u> Leicester, 1908	L		LC	C	L			
2. <u>jacobsoni</u> (Edwards), 1930	LT							
3. <u>splendens</u> (De Meijere), 1909		L*	LT					
Genus <u>TOPOMYIA</u> Leicester								
Subgenus <u>SUAYMYIA</u> Thurman								
1. <u>argenteoventralis</u> Leicester, 1908	L	L						
2. <u>auriceps</u> Brug, 1939					LT			
Subgenus <u>TOPOMYIA</u> Leicester								
3. <u>argyropalpis</u> Leicester, 1908			L					
4. <u>dubitans</u> Leicester, 1908		?L*			L			
5. <u>gracilis</u> Leicester, 1908	L		LC	L				
6. <u>nigra</u> Leicester, 1908			L	L				
7. <u>pilosa</u> Brug, 1931	LT							
8. <u>rubithoracis</u> Leicester, 1908	L							
9. <u>spathulirostris</u> Edwards, 1923			L					
10. <u>tipuliformis</u> Leicester, 1908	L		L					
Genus <u>TRIPTEROIDES</u> Giles								
Subgenus <u>RACHIONOTOMYIA</u> Theobald								
1. <u>altivallis</u> Ronne-Wepster, 1948							LT	
2. <u>aranoides</u> (Theobald), 1901	L	L	LC	L				
3. <u>argenteiventris</u> (Theobald), 1905							L	
4. <u>diguelensis</u> Brug, 1934							LT	
5. <u>microlepis</u> (Edwards), 1927							LT	
6. <u>obscurus</u> Brug, 1934							LT	
7. <u>punctolateralis</u> (Theobald), 1903				L			L*	

D I S T R I B U T I O N I

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
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|--|----|----|-----|---|---|--|---|----|
| 1. <u>ascidicola</u> De Meijere, 1910 | L | | LCT | | | | | |
| 2. <u>bicolor</u> Leicester, 1908 | | L* | L | L | | | | |
| 3. <u>confusa</u> Peyton, 1977 | | | C | | L | | | |
| 4. <u>diagonalis</u> Brug, 1934 | | | | | | | | LT |
| 5. <u>gigantea</u> Brug, 1931 | LT | | | | | | | |
| 6. <u>hirsutifemora</u> Peters, 1964 | L | L* | | | | | | L* |
| 7. <u>maxima</u> Leicester, 1908 | | | L | | | | | |
| 8. <u>moultoni</u> Edwards, 1914 | L | L | | | | | | |
| 9. <u>nivipleura</u> Leicester, 1908 | | L* | L | | | | | |
| 10. <u>obscura</u> Edwards, 1915 | L | L | | | | | L | L |
| 11. <u>quinquemaculata</u> Bonne-Wepster, 1934 | | L* | LT | | | | | |

Subgenus URANOTAENIA Lynch Arribalzaga

- | | | | | | | | | |
|--|----|----|----|--|---|---|--|----|
| 12. <u>albescens</u> Taylor, 1914 | | | | | | | | L |
| 13. <u>antennalis</u> Taylor, 1919 | | | | | | | | L |
| 14. <u>argyrotarsis</u> Leicester, 1908 | | | | | | L | | L* |
| 15. <u>bimaculata</u> Leicester, 1908 | | L | L | | | | | |
| 16. <u>campestris</u> Leicester, 1908 | LC | L* | L | | L | | | |
| 17. <u>fimbriata</u> King and Hoogstraal, 1946 | | | | | | | | LT |
| 18. <u>gerdae</u> Sloof, 1963 | | | | | | | | LT |
| 19. <u>heiseri</u> Baisas, 1935 | | | | | | | | ?C |
| 20. <u>lateralis</u> Ludlow, 1905 | L | ?C | ?C | | | | | L |
| 21. <u>longirostris</u> Leicester, 1908 | | | L | | | | | |
| 22. <u>macfarlanei</u> Edwards, 1914 | L | | L | | | | | |
| 23. <u>metatarsata</u> Edwards, 1914 | | L | L | | | | | |
| 24. <u>micans</u> Leicester, 1908 | | L | L | | | | | |
| 25. <u>neotibialis</u> King and Hoogstraal, 1946 | | | | | | | | LT |
| 26. <u>pygmaea</u> Theobald, 1901 | | ?C | | | | | | LT |
| 27. <u>setosa</u> King and Hoogstraal, 1946 | | | | | | | | LT |
| 28. <u>subnormalis</u> Martini, 1920 | | L | L | | | | | |
| 29. <u>subtibioclada</u> King and Hoogstraal, 1946 | | | | | | | | LT |
| 30. <u>tibialis</u> Taylor, 1919 | | | | | | L | | |

Subfamily TOXORHYNCHITINAE

Genus TOXORHYNCHITES Theobald

Subgenus TOXORHYNCHITES Theobald

- | | | | | | | | |
|---|----|----|---|--|----|----|---|
| 1. <u>amboinensis</u> (Doleschall), 1857 | | L* | L | | L | LT | L |
| 2. <u>aurifluus</u> (Edwards), 1921 | L | | L | | ?L | | |
| 3. <u>coeruleus</u> (Brug), 1934 | LT | | | | | | |
| 4. <u>gravelyi</u> (Edwards), 1921 | L | | | | | | |
| 5. <u>inornatus</u> (Walker), 1865 | | | | | | | L |
| 6. <u>inornatus</u> ssp. <u>albitarsis</u> (Brug), 1939 | | | | | LT | | |

D I S T R I B U T I O N 1

Taxonomic listing	Smt	Kln	Jw	LSI	Slw	Mlk	IJ	Ind.
7. <u>kempi</u> (Edwards), 1921			LC		L			
8. <u>metallicus</u> Leicester, 1904	L		LC					
9. <u>minimus</u> (Theobald), 1905	L							
10. <u>quasiferox</u> (Leicester), 1908	L	L*	L					
11. <u>speciosus</u> (Skuse), 1889							L	
12. <u>splendens</u> (Wiedemann), 1819	L		LCT	L		L	L	
13. <u>sumatranus</u> (Brug), 1939	LT							

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ANNEX 1

Total number of taxa reported from Indonesia by genus.

<u>Genus</u>	<u>Total taxa</u>
<u>Anopheles</u>	80
<u>Bironella</u>	6
<u>Aedeomyia</u>	1
<u>Aedes</u>	125
<u>Armigeres</u>	26
<u>Heizmannia</u>	5
<u>Culex</u>	82
<u>Ficalbia</u>	2
<u>Mimomyia</u>	8
<u>Hodgesia</u>	3
<u>Coquillettidia</u>	8
<u>Mansonia</u>	8
<u>Orthopodomyia</u>	3
<u>Malaya</u>	3
<u>Topomyia</u>	10
<u>Tripteroides</u>	44
<u>Uranotaenia</u>	30
<u>Toxorhynchites</u>	13
<hr/>	
Total (18 genera)	457

ANNEX 2

Further possible species records in Indonesia:

Kalimantan (Indonesian Borneo)

- An (Ano.) acaci Baisas, 1946
borneensis McArthur, 1949
collessi Reid, 1963
gigas ssp. crockeri Colless, 1955
hodgkini Reid, 1962
- An. (Cel.) limosus King, 1932
riparis ssp. macarthuri Colless, 1956
saungi Colless, 1955
stookesi Colless, 1955
watsonii (Leicester), 1908
- Ae. (Can.) curtipes Edwards, 1915
- Ae. (Fin.) mjoebergi (Edwards), 1926
pexus Colless, 1958
subniveus Edwards, 1922
- Ae. (Stg.) alcasidi Huang, 1972
- Ae. (Ver.) cautus Barraud, 1928
comosus Reinert, 1974
hamistylus Laffoon, 1946
indecorabilis (Leicester), 1908
leicesteri Edwards, 1917
pseudovarietas Reinert, 1974
ramalingami Reinert, 1974
sabahensis Reinert, 1974
singularis (Leicester), 1908
sohni Reinert, 1974
- Ar. (Arm.) aureolineatus (Leicester), 1908
conjungens Edwards, 1914
fimbriatus Edwards, 1930
hybridus Edwards, 1914
- Hs. (Hez.) funerea (Leicester), 1908
- Ze. gracilis Leicester, 1908
- Cx. (Cux.) kinabaluensis Sirivanakarn, 1976
- Cx. (Cuf.) scanloni Bram, 1967
shebbearei Barraud, 1924
- Cx. (Eum.) malayensis Sirivanakarn, 1972
selai Klein and Sirivanakarn, 1969
simplicicornis Edwards, 1930
- Cx. (Lop.) aestivus Sirivanakarn, 1977
alphus Colless, 1965
barkeri (Theobald), 1907
brevipalpis (Theobald), 1905
coerulescens Edwards, 1928
crassicomus Colless, 1965
eminentia (Leicester), 1908
ganapathi Colless, 1965
imposter Sirivanakarn, 1977

- lavatae Stone and Bohart, 1944
paraculeatus Sirivanakarn, 1977
Mi. (Mim.) aurea (Leicester), 1908
Or. albipes Leicester, 1904
To. (Sua.) decorabilis Leicester, 1908
To. (Top.) trifida Edwards, 1922
Tp. (Trp.) nepenthis (Edwards), 1915
Ur. (Pfc.) demeilloni Peyton and Rattanaarithikul, 1970
harrisoni Peyton, 1977
lutescens Leicester, 1908
modesta Leicester, 1908
moufiedi Peyton, 1977
propinqua Peyton, 1977
pseudomaculipleura Peyton and Rattanaarithikul, 1970
quasimodesta Peyton, 1977
reinerti Peyton, 1977
rossi Delfinado, 1966
xanthomelaena Edwards, 1925
Tx. (Tox.) acaudatus (Leicester), 1908
auripes (Edwards), 1935
magnificus (Leicester), 1908
nigripes (Edwards), 1935
pendleburyi (Edwards), 1930

Irian Jaya (Indonesia and New Guinea)

- An. (Ano.) papuensis Dobrotworsky, 1957.
Bi. (Bru.) obscura Tenorio, 1975
Ae. (Fin.) candidoscuteillum Marks, 1947
clintoni Taylor, 1946
dobodurus King and Hoogstraal, 1946
keefei King and Hoogstraal, 1946
shehzadae Qutubuddin, 1972
stanleyi Peters, 1963
tsiliensis King and Hoogstraal, 1946
Ae. (Geo.) fimbripes Edwards, 1924
Ae. (Hua.) wauensis Huang, 1968
Ae. (Lep.) aurimargo Edwards, 1922
Ae. (Mac.) littlechildi Taylor, 1933
Ae. (Muc.) aurantius ssp. chrysogaster (Taylor), 1927
Ae. (Psk.) multiplex (Theobald), 1903
Ae. (Ver.) cucciol Belkin, 1962
embiensis Huang, 1968
killertonis Huang, 1968
milnensis King and Hoogstraal, 1947
obsoletus Huang, 1968
vanapus Huang, 1968
variabilis Huang, 1968
Cx. (Cux.) barraudi Edwards, 1922
edwardsi Barraud, 1923
litoralis Bohart, 1946

- vicinus (Taylor), 1916
- Cx. (Cui.) baillyi Barraud, 1934
ruthae Peters, 1958
- Cx. (Lop.) bolii Sirivanakarn, 1968
castaneus Sirivanakarn, 1973
christiani Colless, 1960
collessi Sirivanakarn, 1968
crowei Sirivanakarn, 1968
durhami Sirivanakarn, 1968
gressitti Sirivanakarn, 1968
kowiroensis Sirivanakarn, 1968
lakei Sirivanakarn, 1968
minjensis Sirivanakarn, 1968
muruae Sirivanakarn, 1968
petersi Colless, 1960
pseudornatus Colless, 1960
pseudorubithoracis Sirivanakarn, 1968
schilfgaardei Sirivanakarn, 1968
sedlacekiae Sirivanakarn, 1968
singuawaensis Sirivanakarn, 1969
steffani Sirivanakarn, 1968
submarginalis Sirivanakarn, 1973
versabilis Sirivanakarn, 1968
wamanguae Sirivanakarn, 1968
- Ho. cairnsensis Taylor, 1919
- Cq. (Coq.) xanthoqaster (Edwards), 1924
- Ma. (Man.) septempunctata Theobald, 1905
- Ml. leei (Wharton), 1947
- To. (Sua.) papuensis Marks, 1960
- Tp. (Rah.) perplexus Peters, 1963
standfasti Peters, 1959
- Tp. (Trp.) littlechildi (Edwards), 1930
lorengauli Peters, 1963
novohanoverae Peters, 1963
quasiornatus (Taylor), 1915
splendens Lee, 1946
- Ur. (Pfc.) atra Theobald, 1905
- Ur. (Ura.) albosternopleura Peters, 1963
amiensis Peters, 1963
moresbyensis Peters, 1963
novaguinensis Peters, 1963
novaguinensis ssp. alticola Peters, 1963
paranovaguinensis Peters, 1963
tibioclada King and Hoogstraal, 1946

ANNEX 3

List of generic and sub-generic abbreviations for Indonesian mosquitoes (See Reinert, 1975).

<u>Genus</u>	<u>Subgenus</u>
<u>Anopheles</u> = <u>An.</u>	<u>Anopheles</u> = <u>Ano.</u>
<u>Bironella</u> = <u>Bi.</u>	<u>Cellia</u> = <u>Cel.</u>
<u>Aedeomyia</u> = <u>Ad.</u>	<u>Bironella</u> = <u>Bir.</u>
<u>Aedes</u> = <u>Ae.</u>	<u>Brugellia</u> = <u>Bru.</u>
	<u>Aedeomyia</u> = <u>Ady.</u>
	<u>Aedimorphus</u> = <u>Adm.</u>
	<u>Alanstonea</u> = <u>Ala.</u>
	<u>Cancraedes</u> = <u>Can.</u>
	<u>Diceromyia</u> = <u>Dic.</u>
	<u>Edwardsaedes</u> = <u>Edw.</u>
	<u>Finlaya</u> = <u>Fin.</u>
	<u>Geoskusea</u> = <u>Geo.</u>
	<u>Lorrainea</u> = <u>Lor.</u>
	<u>Macleaya</u> = <u>Mac.</u>
	<u>Mucidus</u> = <u>Muc.</u>
	<u>Neomelaniconion</u> = <u>Neo.</u>
	<u>Ochlerotatus</u> = <u>Och.</u>
	<u>Paraedes</u> = <u>Par.</u>
	<u>Pseudoskusea</u> = <u>Psk.</u>
	<u>Rhinoskusea</u> = <u>Rhi.</u>
	<u>Stegomyia</u> = <u>Stg.</u>
	<u>Verrallina</u> = <u>Ver.</u>
<u>Armigeres</u> = <u>Ar.</u>	<u>Armigeres</u> = <u>Arm.</u>
<u>Heizmannia</u> = <u>Hiz.</u>	<u>Leicesteria</u> = <u>Lei.</u>
<u>Culex</u> = <u>Cx.</u>	<u>Heizmannia</u> = <u>Hez.</u>
	<u>Mattinglyia</u> = <u>Mat.</u>
	<u>Acalloomyia</u> = <u>Aca.</u>
	<u>Acallyntrum</u> = <u>Acl.</u>
	<u>Culex</u> = <u>Cux.</u>
	<u>Culicomyia</u> = <u>Cui.</u>
	<u>Eumelanomyia</u> = <u>Eum.</u>
	<u>Lophoceraomyia</u> = <u>Lop.</u>
	<u>Lutzia</u> = <u>Lut.</u>
<u>Ficalbia</u> = <u>Fi.</u>	<u>Etorleptomyia</u> = <u>Eto.</u>
<u>Mimomyia</u> = <u>Mi.</u>	<u>Mimomyia</u> = <u>Mim.</u>
	<u>Ingramia</u> = <u>Ing.</u>
<u>Hodgesia</u> = <u>Ho.</u>	<u>Coquillettidia</u> = <u>Coq.</u>
<u>Coquillettidia</u> = <u>Cq.</u>	<u>Mansonioides</u> = <u>Mnd.</u>
<u>Mansonia</u> = <u>Ma.</u>	
<u>Orthopodomyia</u> = <u>Or.</u>	
<u>Malaya</u> = <u>Ml.</u>	
<u>Topomyia</u> = <u>To.</u>	
<u>Tripteroides</u> = <u>Tp.</u>	<u>Suaymyia</u> = <u>Sua.</u>
	<u>Topomyia</u> = <u>Top.</u>
	<u>Rachionotomyia</u> = <u>Rah.</u>
	<u>Rachisoura</u> = <u>Rac.</u>

Uranotaenia = Ur.

Toxorhynchites = Tx.

Zeugnomyia = Ze.

Tripteroides = Trp.

Pseudoficalbia = Pfc.

Uranotaenia = Ura.

Toxorhynchites = Tox.

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mics and disease relationships. A few earlier checklists exist, none has been prepared for Indonesia taking into account extensive studies of the last 30 years

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